

US EPA ARCHIVE DOCUMENT

Arlington's Community Energy Plan

Ensuring a Competitive and Sustainable Community



Presentation Outline

- **Brief background**
 - *Establishing relationships with stakeholders in all sectors*

- **Crystal City Integrated Energy Master Plan (CC IEMP)**

Arlington's Energy Journey – Creating & Implementing a Vision

"Smart Growth"
(1960s)

Green Building
(1999)

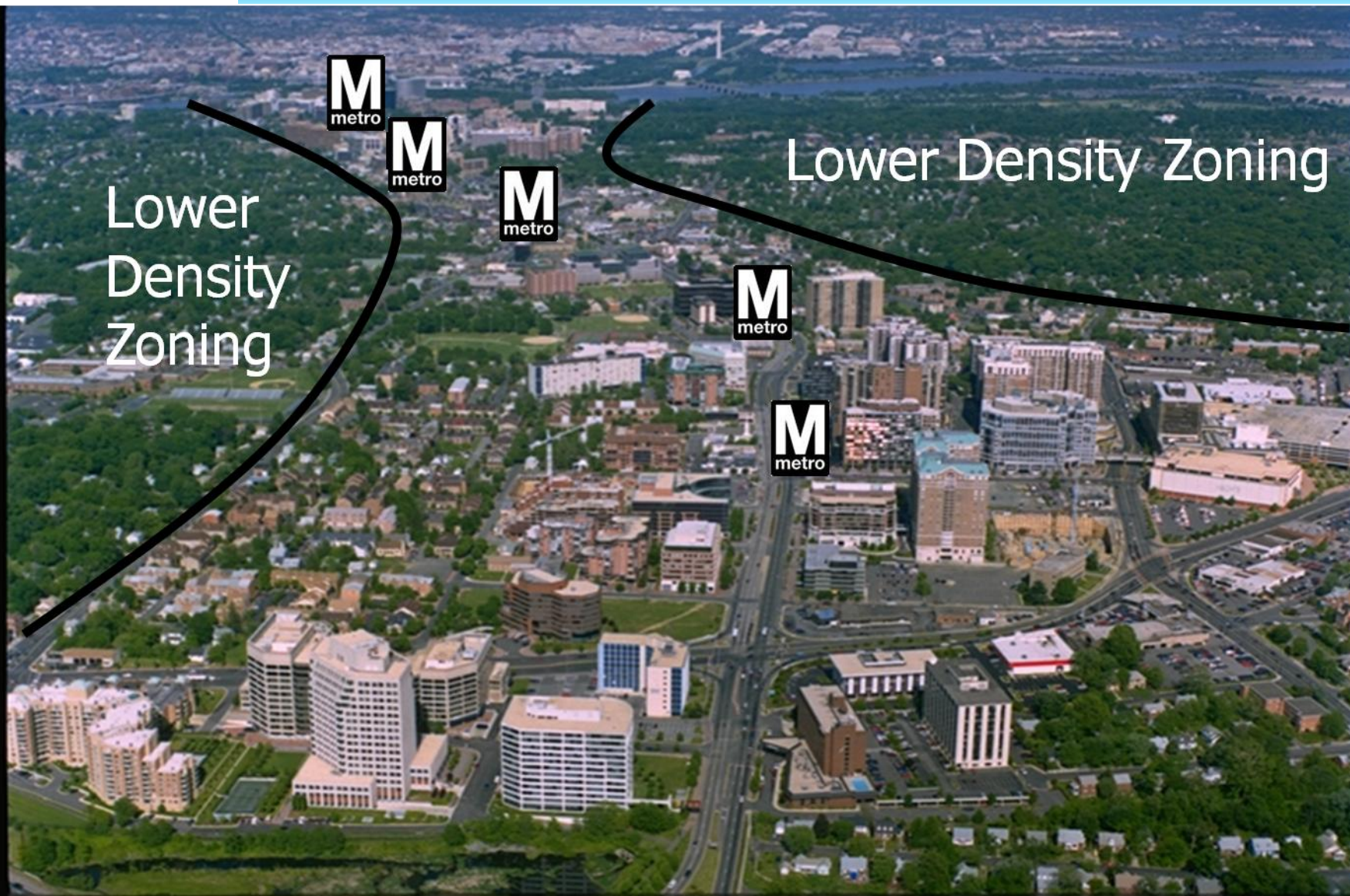
*Trips to
Germany*
(2000s)

AIRE
(2007)

*Community
Energy Plan*
(2013)



Smart Growth

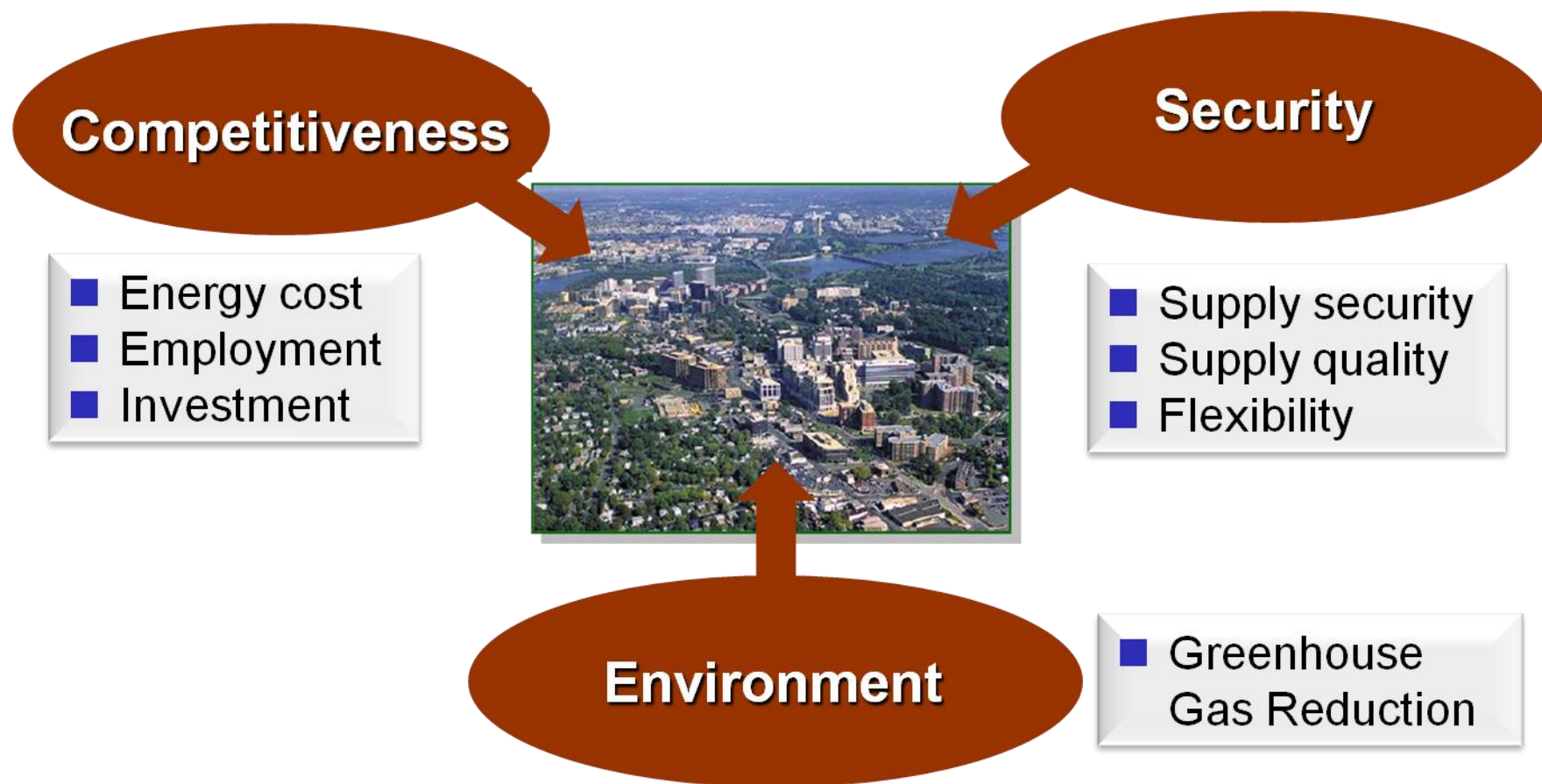


Arlington's Current Comprehensive Plan Elements

- *Chesapeake Bay Preservation*
- *Historic Preservation*
- *Land Use*
- *Natural Resources Mgmt*
- *Open Space/Public Spaces*
- *Public Art*
- *Recycling*
- *Sanitary Sewer*
- *Stormwater Management*
- *Transportation*
Streets, Transit, Biking,
Parking, Curbside Mgmt,
Pedestrian)
- *Urban Forest*
- *Water Distribution System*

Energy?????

Community Energy Plan: Background



Three Groups of Benefits

Arlington Community Energy Framework

- *Energy efficiency – If you don't need it - don't use it*
- *Heat Recovery – If it's already there – use it*
- *Renewable energy – If it makes sense, go carbon free*
- *Energy distribution – Invest where it makes sense*

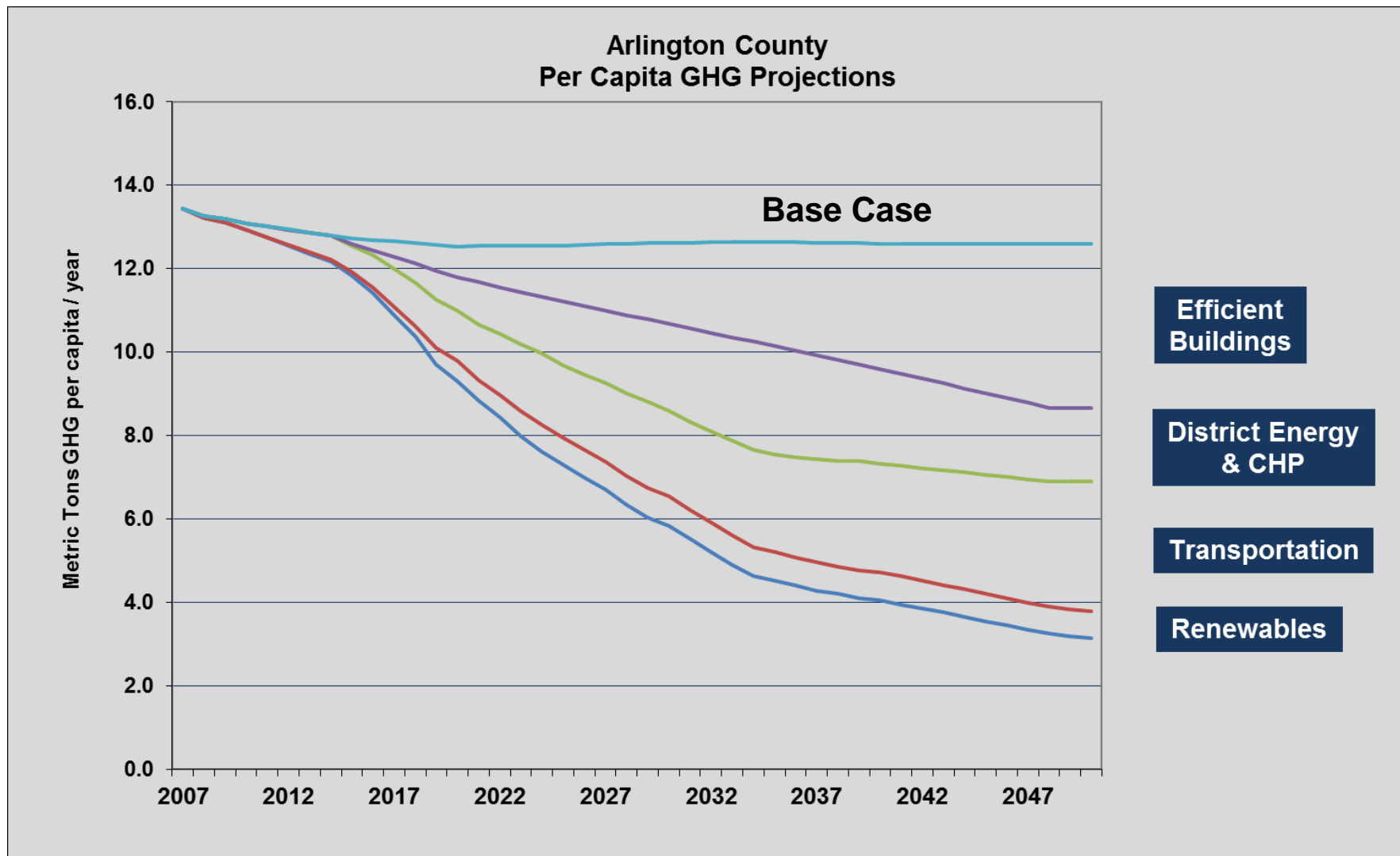
Integrated Solution – Tailored for County!

Headline Target: 2050 Greenhouse Gas Emissions

- **Task Force recommends a GHG emissions target of 3 metric tons (mt) CO₂e/capita/year by 2050.**
- In 2007, Arlington produced 13.4 mt CO₂e/capita/year
- Task Force also recommended Arlington's target for 2050 be 2.2 mt CO₂e/capita/year if regional energy plan established.

Per Capita GHG Emissions

Impacts of Key Energy Policy Recommendations



Community Energy and Sustainability (CES) Task Force



CES Task Force (29 members)

- **Businesses (8)**
 - *JBG*
 - *Little Diversified Architectural Consulting*
 - *Lockheed Martin*
 - *Marriott International*
 - *SRA International*
 - *Turner Construction*
 - *VA Hospital Center*
 - *Vornado*
- **Citizens (4)**
 - *Arlington Civic Federation*
 - *Commissions*
- **Educational Institutions (2)**
 - *Arlington Public Schools*
 - *Virginia Tech*
- **Energy & Energy Tech Industry (3)**
 - *Dominion Virginia Power*
 - *United Solar Ovonic (Uni-Solar)*
 - *Washington Gas*
- **Local, State and Federal Gov'ts (5)**
 - *The Pentagon*
 - *US EPA*
 - *Commonwealth of Virginia Senate*
- **Nonprofits/Associations (5)**
 - *Apartment and Office Building Association*
 - *Arlington Chamber of Commerce*
 - *Arlington Partnership for Affordable Housing*
 - *Arlingtonians for a Clean Environment*
 - *Pew Center on Global Climate*
- **Regional Transportation Authorities (2)**
 - *Metro Washington Airports Authority*
 - *Metro Washington Area Transit Authority*

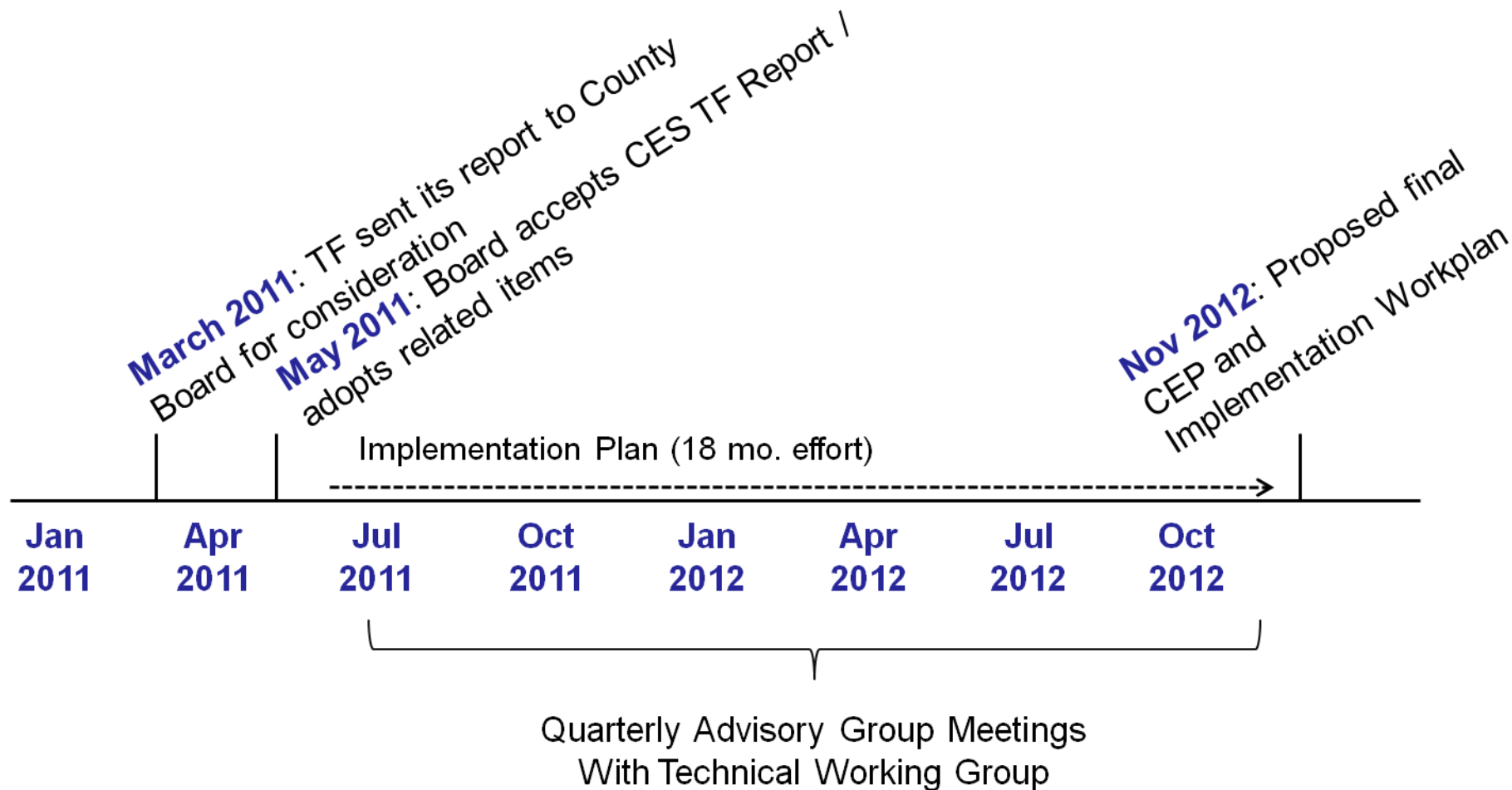
Technical Work Group (TWG)

■ Five Transformation Groups:

- *Buildings*
- *District Energy / Renewable Energy*
- *Transportation*
- *Education & Outreach*
- *Finance*



Timeline

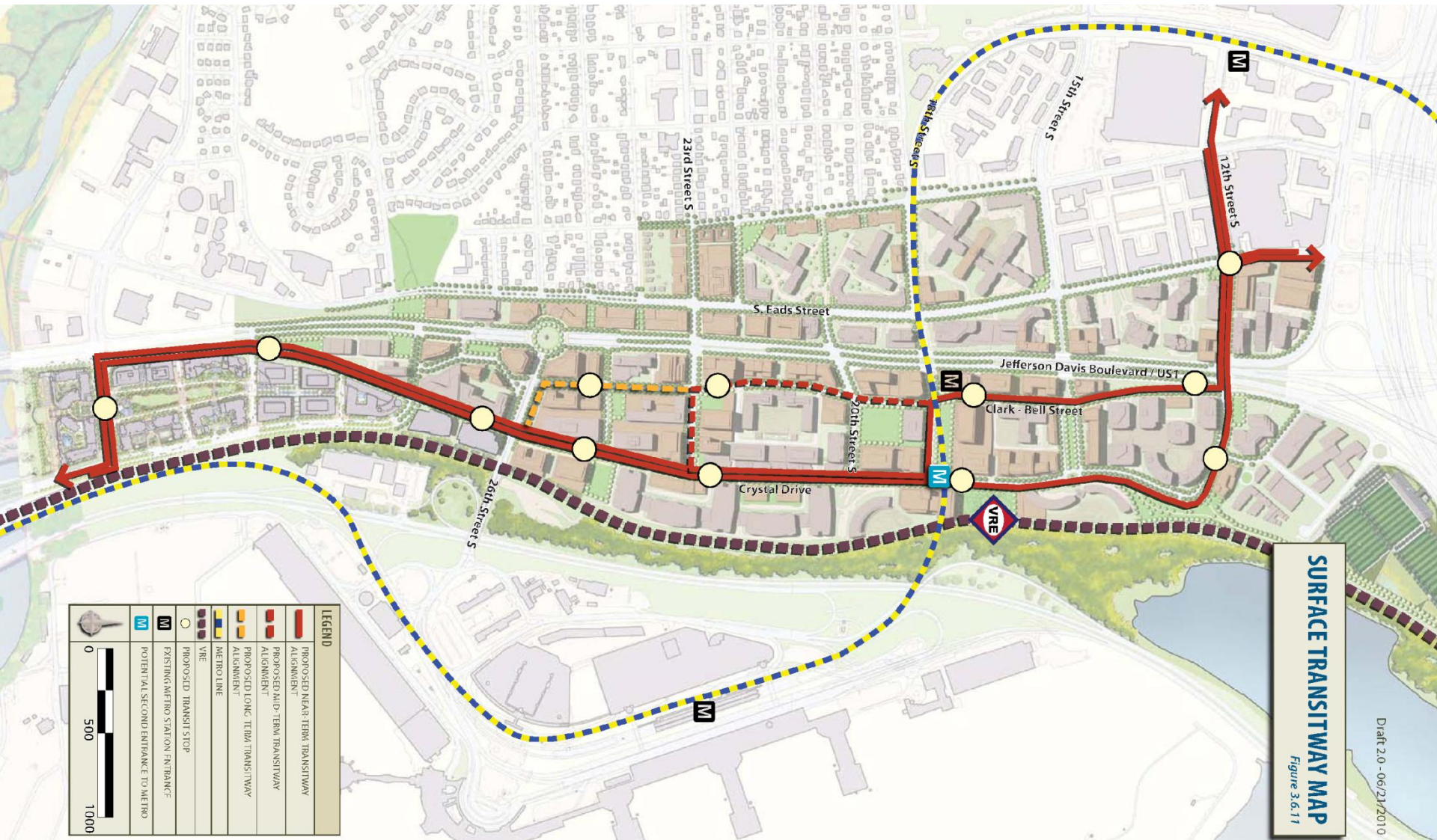


Crystal City IEMP

- 391 acres
- Developer, Utility and County Government funded/partnered on the initiative
- Began December 2011 – report due late summer 2012



Proposed Surface Transitway (Streetcar)



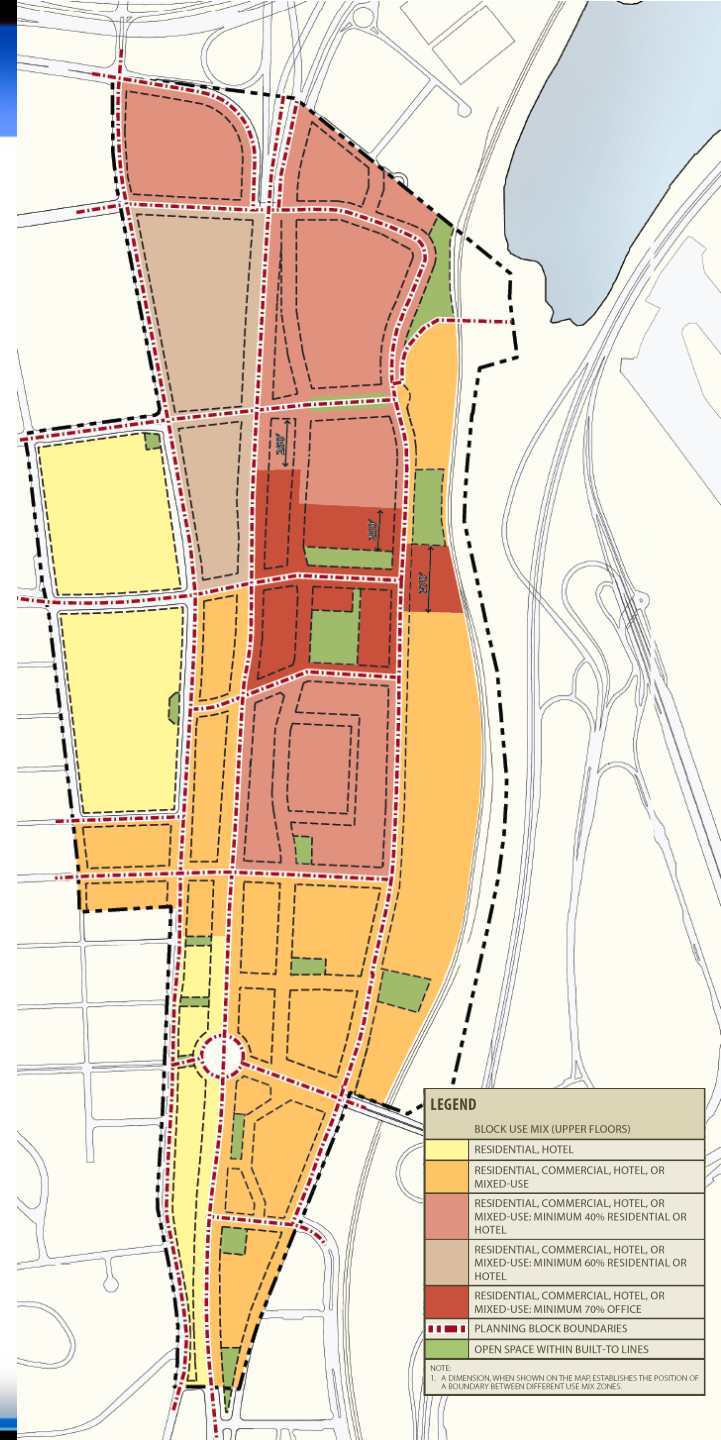
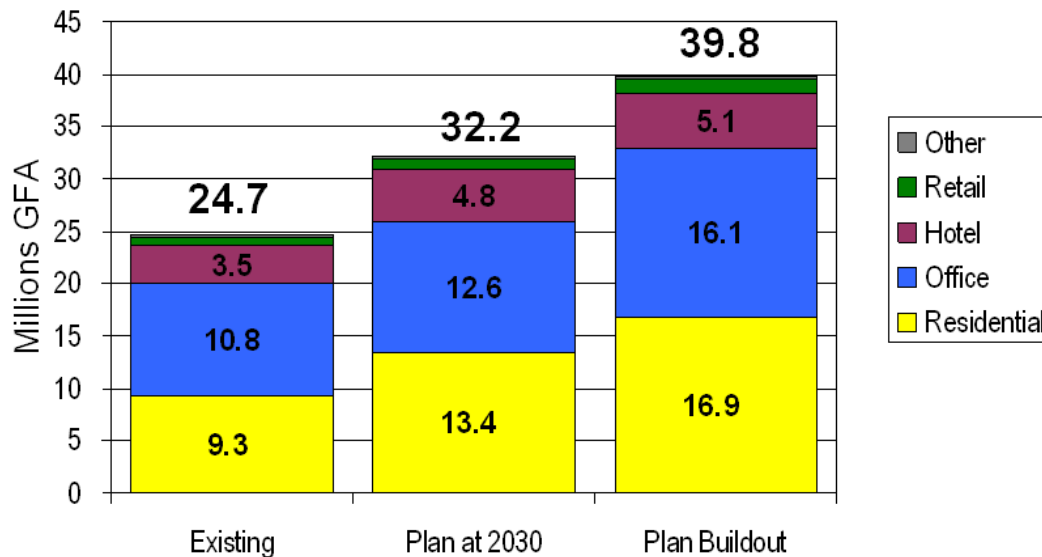
Land Use Mix

GOAL: Provide a mix of uses

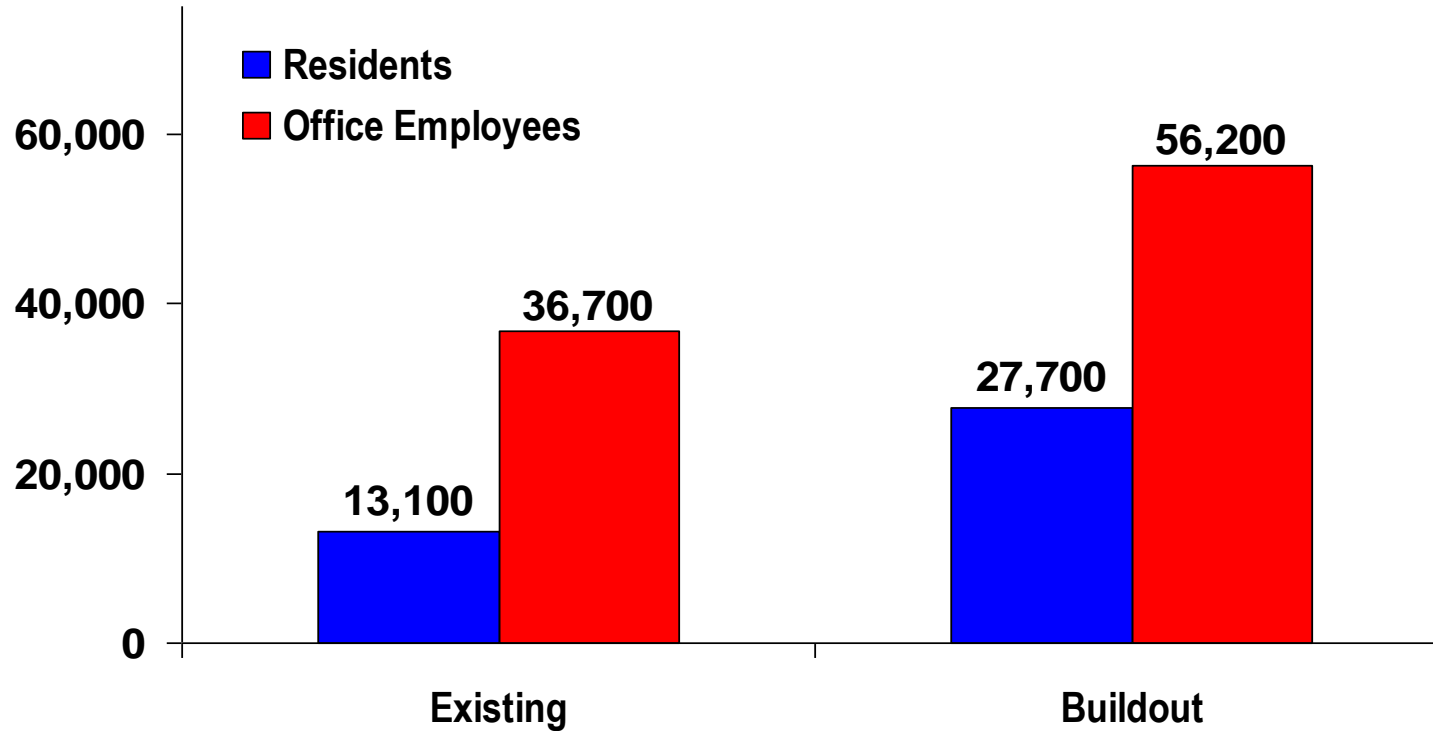
Achieve a better balance of office and residential uses, and daytime and evening populations

Create a thriving “Class A” office environment

Provide a mix of housing options



Proposed Plan – Demographic Forecast



Recommendations

- **What can other communities do to get CEP, IEMP funded?**
 - **Make explicit connections between energy projects and 1) economics, 2) energy security, 3) environment**
 - **Gain support from respected community leaders – they can carry the message through their networks**
 - **Highlight success stories**
 - **Pilot projects**